AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) Per(3,6-anhydro)cyclodextrin derivative corresponding to one of the following formulae:

$$\begin{array}{c|c}
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in which:

- at least one of the groups R¹ represents a group –OCOHR² and the other groups R¹, which may be identical or different, represent a group corresponding to one of the formulae: -OCONHR², -OH, -OR³, -SH, -SR³, -OCOR³, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONR³R⁴, -CN, -COOR³, -OCH₂CO₂H, -COOH and –R³, in which the group(s) R², which are identical or different, represent a saturated or unsaturated aliphatic group, R³ and R⁴, which are identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon group optionally substituted with halogen atoms which may contain one or more heteroatoms chosen from O, S and N, and/or
- at least one of the groups R¹ represents a group -OCONH(CR⁵R⁶)_mNHCOOR⁷, the other groups R¹ corresponding to the same definition as that given above, R⁵ and R⁶, which are identical or different, represent H or a saturated or unsaturated aliphatic group, and R⁷ represents a glucosidic or maltosidic unit of the peranhydrocyclodextrin and m is an integer ranging from 1 to 20;
- n is equal to 6, 7 or 8.

2. (Original) Per(3,6-anhydro)cyclodextrin derivative according to Claim 1, in which all the groups R¹ represent the group –OCONHR² with R² having the same meaning as in Claim 1, and n is equal to 6.

- 3. (Original) Per(3,6-anhydro)cyclodextrin derivative according to Claim 2, in which R² represents an ethyl radical.
- 4. (Original) Per(3,6-anhydro)cyclodextrin derivative according to Claim 2, in which R² represents a hexyl radical.
- 5. (Original) Method for preparing a per(3,6-anhydro)cyclodextrin derivative corresponding to one of the following formulae (I) and (II):

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in which:

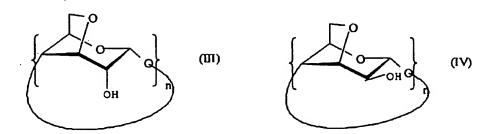
- at least one of the groups R¹ represents a group -OCONHR² and the other groups R¹, which may be identical or different, represent a group corresponding to one of the formulae: -OCONHR², -OH, -OR³, -SH, -SR³, -OCOR³, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONR³R⁴, -CN, -COOR³, -OCH₂CO₂H, -COOH and -R³, in which the R² group(s), which are identical or different, represent a saturated or unsaturated aliphatic group, R³ and R⁴, which are identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon group optionally substituted with halogen atoms which may contain one or more heteroatoms chosen from O, S and N, and/or
- at least one of the groups R¹ represents a group -OCONH(CR⁵R⁶)_mNHCOOR⁷, the other groups R¹ corresponding to the same definition as that given above, R⁵ and R⁶, which are identical or different, represent H or a saturated or unsaturated aliphatic group, and R⁷ represents

a glucosidic or maltosidic unit of the peranhydrocyclodextrin and m is an integer ranging from 1 to 20;

- n is equal to 6, 7 or 8, said process comprising successively:
- a step consisting in reacting a per(3,6-anhydro)cyclodextrin corresponding to one of the following formulae (III) or (IV):

in which n is equal to 6, 7 or 8, with an isocyanate of formula OCN-R² and/or a diisocyanate OCN(CR⁵R⁶)_mNCO in a quantity such that at least one of the OH groups is converted to a group -OCONHR² and/or to a group -OCONH(CR⁵R⁶)_mNHCOOR⁷; and

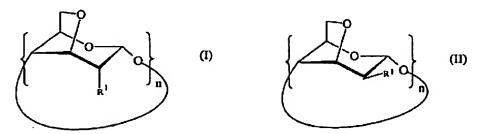
- a step consisting, when not all the OH groups have been converted to a group -OCONHR² and/or -OCONH(CR⁵R⁶)_mNHCOOR⁷, in optionally reacting the remaining OH groups with one or more reagents in order to convert them to the desired groups R¹ different from -OCONHR² and/or -OCONH(CR⁵R⁶)_mNHCOOR⁷.
- 6. (Original) Polymer obtained by reacting at least two per(3,6-anhydro)cyclodextrins corresponding to one of the following formulae (III) or (IV):



in which n is equal to 6, 7 or 8 and a diisocyanate of formula OCN-(CR₅R₆)_m-NCO, in which R⁵ and R⁶, which are identical or different, represent H or a saturated or unsaturated aliphatic group and m is an integer ranging from 1 to 20, the OH groups having not reacted during the reaction to

be optionally converted into groups, which are identical or different, representing groups chosen from: -OCONHR², -OR³, -SH, -SR³, -OCOR³, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONR³R⁴, -CN, -COOR³, -OCH₂COOH, -COOH and -R³, in which the group(s) R² represent a saturated or unsaturated aliphatic group, R³ and R⁴, which may be identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon group optionally substituted with halogen atoms which may contain one or more heteroatoms chosen from O, S and N.

- 7. (Original) Polymer according to Claim 6, for which n is equal to 6 and R⁵ and R⁶ both represent H and m is equal to 6.
- 8. (Currently Amended) Method for binding and separating ions, comprising the steps consisting in:
- bringing a medium containing the said ions chosen from CrO_4^{2-} , $Cr_2O_7^{2-}$ and MnO_4^{2-} into contact with:
- 1) a per(3,6-anhydro)cyclodextrin derivative corresponding to one of the following formulae (I) or (II):



in which:

- at least one of the groups R¹ represents a group -OCONHR² and the other groups R¹, which may be identical or different, represent a group corresponding to one of the formulae: -OCONHR², -OH, -OR³, -SH, -SR3, -OCOR³, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONR³R⁴, -CN, -COOR³, -OCH₂CO₂H, -COOH and -R³, in which the group(s) R², which are identical or different, represent a saturated or unsaturated aliphatic group, R³ and R⁴, which are identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon

group optionally substituted with halogen atoms which may contain one or more heteroatoms chosen from O, S and N, and/or

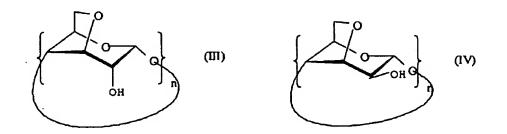
- at least one of the groups R¹ represents a group -OCONH(CR⁵R⁶)_mNHCOOR⁷, the other groups R¹ corresponding to the same definition as that given above, R⁵ and R⁶, which are identical or different, represent H or a saturated or unsaturated aliphatic group, and R⁷ represents a glucosidic or maltosidic unit of the peranhydrocyclodextrin and m is an integer ranging from 1 to 20;
- n is equal to 6, 7 or 8, and/or
- a polymer obtained by reacting at least two per(3,6-anhydro)cyclodextrins of formula (III) or (IV), as defined in claim 6, and a diisocyanate of formula OCN-(CR⁵R⁶)_m-NCO, for which R⁵ and R⁶, which are identical or different, represent H or a saturated or unsaturated aliphatic group and m is an integer ranging from 1 to 20, the OH groups having not reacted during the reaction to be optionally converted into groups, which are identical or different, representing groups chosen from: -OCONHR², -OR³, -SH, -SR³, -OCOR3, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONR³R⁴, -CN, -COOR³, -OCH₂CO₂H, -COOH and -R³, in which the group(s) R², which are identical or different, represent a saturated or unsaturated aliphatic group, R³ and R⁴, which may be identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon group which may contain one or more heteroatoms chosen from O, S and N, and n is equal to 6, 7 or 8, in order to bind the said ions in the form of a complex with the per(3,6-anhydro)cyclodextrin derivative or the polymer; and separating the said ions thus complexed from the said medium.

9. (Canceled)

10. (Currently Amended) Method according to Claim [[9]] 8, in which the per(3,6-anhydro)cyclodextrin derivative corresponds to formula (I) in which all the groups R¹ represent the group -OCONHR² with R² having the same meaning as in Claim 1, and n is equal to 6.

11. (Original) Method according to Claim 10, in which R² represents an ethyl or hexyl radical.

12. (Currently Amended) Method according to Claim 8, in which the polymer is as defined in Claim 7 obtained by reacting at least two per(3,6-anhydro)cyclodextrins corresponding to one of the following formulae (III) or (IV):



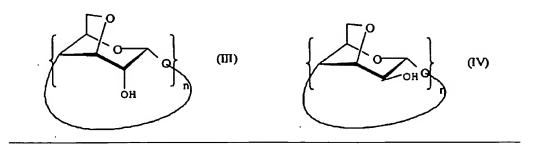
in which n is equal to 6 and a diisocyanate of formula OCN-(CR₅R₆)_m-NCO, in which R⁵ and R⁶ represent H and m is equal to 6, the OH groups having not reacted during the reaction to be optionally converted into groups, which are identical or different, representing groups chosen from: -OCONHR², -OR³, -SH, -SR³, -OCOR³, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONHR³, -CONR³R⁴, -CN, -COOR³, -OCH₂COOH, -COOH and -R³, in which the group(s) R² represent a saturated or unsaturated aliphatic group, R³ and R⁴, which may be identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon group optionally substituted with halogen atoms which may contain one or more heteroatoms chosen from O, S and N.

- 13. (Previously Presented) Method according to Claim 8, in which, since the said medium is an aqueous solution, the per(3,6-anhydro)cyclodextrin derivative or the polymer is dissolved in an organic solvent which is immiscible with the said aqueous solution.
- 14. (Currently Amended) Pharmaceutical composition for the decontamination, in relation to ions based-on-chromium or manganese chosen from CrO₄²⁻, Cr₂O₇²⁻ and MnO₄²⁻, of a human being, comprising:
- (1) a per(3,6-anhydro)cyclodextrin derivative corresponding to one of the following formulae (I) or (II):

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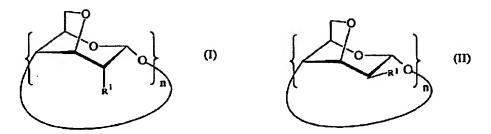
in which:

- at least one of the groups R¹ represents a group -OCONHR² and the other groups R¹, which may be identical or different, represent a group corresponding to one of the formulae: -OCONHR², -OH, -OR³, -SH, -SR³, -OCOR³, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONR³R⁴, -CN, -COOR³, -OCH₂CO₂H, -COOH and -R³, in which the group(s) R², which are identical or different, represent a saturated or unsaturated aliphatic group, R3 and R4, which are identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon group optionally substituted with halogen atoms which may contain one or more heteroatoms chosen from O, S and N, and/or
- at least one of the groups R¹ represents a group -OCONH(CR⁵R⁶)_mNHCOOR⁷, the other groups R¹ corresponding to the same definition as that given above, R⁵ and R⁶, which are identical or different, represent H or a saturated or unsaturated aliphatic group, and R⁷ represents a glucosidic or maltosidic unit of the peranhydrocyclodextrin and m is an integer ranging from 1 to 20;
- n is equal to 6, 7 or 8, and/or
- (2) a polymer as defined in Claims 6 and 7 obtained by reacting at least two per(3,6-anhydro)cyclodextrins corresponding to one of the following formulae (III) or (IV):



in which n is equal to 6, 7 or 8 and a diisocyanate of formula OCN-(CR₅R₆)_m-NCO, in which R⁵ and R⁶, which are identical or different, represent H or a saturated or unsaturated aliphatic group and m is an integer ranging from 1 to 20, the OH groups having not reacted during the reaction to be optionally converted into groups, which are identical or different, representing groups chosen from: -OCONHR², -OR³, -SH, -SR³, -OCOR³, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONHR³, -CONR³R⁴, -CN, -COOR³, -OCH₂COOH, -COOH and -R³, in which the group(s) R² represent a saturated or unsaturated aliphatic group, R³ and R⁴, which may be identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon group optionally substituted with halogen atoms which may contain one or more heteroatoms chosen from O, S and N.

- 15. (Currently Amended) Pharmaceutical composition according to Claim 14, in which all the groups R¹ represent the group -O-CO-NHR² and n is equal to 6, R²-having the same meaning as in Claim 1.
- 16. (Currently Amended) Complex of an ion chosen from CrO_4^{2-} , $Cr_2O_7^{2-}$ and MnO_4^{2-} with:
- (1) a per(3,6-anhydro)cyclodextrin derivative corresponding to one of the following formulae:

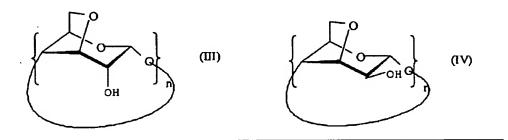


in which:

- at least one of the groups R¹ represents a group -OCONHR² and the other groups R¹, which may be identical or different, represent a group corresponding to one of the formulae: -OCONHR², -OH, -SH, -SR³, -OCOR³, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONR³R⁴, -CN, -COOR³, -OCH₂CO₂H, -COOH and -R³, in which the group(s) R², which are identical or different, represent a saturated or unsaturated aliphatic group, R³ and R⁴,

which are identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon group optionally substituted with halogen atoms which may contain one or more heteroatoms chosen from O, S and N, and/or

- at least one of the groups R¹ represents a group OCONH(CR⁵R⁶)_mNHCOOR⁷, the other groups R¹ corresponding to the same definition as that given above, R⁵ and R⁶, which are identical or different, represent H or a saturated or unsaturated aliphatic group, and R⁷ represents a glucosidic or maltosidic unit of peranhydrocyclodextrin and m is an integer ranging from 1 to 20;
- n is equal to 6, 7 or 8, and/or
- (2) a polymer as defined in Claims 6 and 7 obtained by reacting at least two per(3,6-anhydro)cyclodextrins corresponding to one of the following formulae (III) or (IV):



in which n is equal to 6, 7 or 8 and a diisocyanate of formula OCN-(CR₅R₆)_m-NCO, in which R⁵ and R⁶, which are identical or different, represent H or a saturated or unsaturated aliphatic group and m is an integer ranging from 1 to 20, the OH groups having not reacted during the reaction to be optionally converted into groups, which are identical or different, representing groups chosen from: -OCONHR², -OR³, -SH, -SR³, -OCOR³, -NH₂, -NHR³, -NR³R⁴, -CONH₂, -CONHR³, -CONH₂, -CONH₂, -CONH₂ -CONH₂ and -R³, in which the group(s) R² represent a saturated or unsaturated aliphatic group, R³ and R⁴, which may be identical or different, represent a saturated or unsaturated, aliphatic or aromatic hydrocarbon group optionally substituted with halogen atoms which may contain one or more heteroatoms chosen from O, S and N.

17. (Currently Amended) Complex according to Claim 16, in which the per(3,6-anhydro)cyclodextrin derivative corresponds to formula (I) in which all the groups R¹ represent the group -O-CO-NHR² and n is equal to 6, R² having the same meaning as in Claim 1.